

REMARKS

This paper is being filed in response to the Office Action dated November 16, 2000. Applicants request a two-month extension of time and enclose the required fee pursuant to 37 C.F.R. §1.17(a)(2).

As the Examiner noted, a marked-up copy of the substitute specification filed when this application first entered the National Phase has not been provided. In attempting to generate a marked-up copy, Applicants' copy of the substitute specification as originally filed in this application was altered to insert paragraph numbers. A copy of the substitute specification as filed that is suitable for generating a marked up copy is, therefore, not readily available to Applicants. In light of this, and the fact that the formal requirements for entry of the original substitute specification were never fulfilled, Applicants now submit a new substitute specification with paragraph numbers. This new substitute specification is identical to the originally filed substitute specification in all respects except for the removal of line numbers and insertion of paragraph numbers. Applicants request that the new substitute specification submitted with this Amendment be entered in place of the PCT specification. A document showing all changes that were made to the English translation of the French PCT specification to arrive at the present substitute specification is also submitted herewith pursuant to 37 C.F.R. 1.125(b). Finally, a copy of the translation from French to English of the PCT specification is also provided. No new matter is added by this substitute specification.

Claims 13 and 15-25 remain pending in the instant application. Applicants have canceled claim 14. Applicants have amended claims 13, 15, and 23 and the rewritten form of each appears in the preceding "IN THE CLAIMS" section. Applicants have attached herewith a marked up copy of each amended claim for the Examiner's convenience only. Should any discrepancies be discovered, the

version presented in the preceding "IN THE CLAIMS" section shall take precedence. All amendments to the claims are supported by the specification as filed and do not constitute new matter.

The Examiner objected to Claim 14 under 37 C.F.R. §1.75(c). Claim 14 has been cancelled rendering this objection moot.

1. Amended Claims are Definite

Claim 13 has been rejected under 35 U.S.C. §112¶2 as allegedly indefinite since it recites "characterized in that". This phrase has been eliminated from amended claim 13.

Claims 17, 18, and 20 have been rejected under 35 U.S.C. §112¶2 as allegedly indefinite because these dependent claims recite "mixture of silicas" while independent claim 13 on which these claims depend does not. The Examiner alleges that the scope of the dependent claims is confusing and has requested clarification. Applicants have amended Claim 13 such that it recites "mixture of silicas". Applicants assert that a person of ordinary skill in the art would recognize that the subject agents of claims 17, 18, and 20 are to be added in the stated proportion to the amount of filler.

Claim 23 has been rejected under 35 U.S.C. §112¶2 as lacking sufficient antecedent basis for the recited element, "the solvent". Applicants assert that no antecedent basis is required for the element "the solvent" in view of the amendment of claim 23.

2. Amended Claims are Novel

Claims 13-25 have been rejected under 35 U.S.C. §102(e) as anticipated by U.S. Pat. No. 5,804,644 to Nakafutami et al. (hereinafter "Nakafutami"), U.S. Pat. No. 5,708,053 to Jalics et al. (hereinafter "Jalics"), U.S. Pat. No. 5,534,592 to Halasa et al. (hereinafter "Halasa"), U.S. Pat. No.

6,140,393 to Bomal et al. (hereinafter "Bomal"), or U.S. Pat. No. 5,396,490 to Sagatta et al. (hereinafter "Sagatta"). Applicants respectfully traverse these rejections and assert that the pending claims are not anticipated by Nakafutami, Jalics, Halasa, Bomal, or Sagatta. Claims 15-25 are dependent on independent Claim 13. Therefore, the response to these rejections will be addressed primarily to Claim 13.

For a reference to anticipate under 35 U.S.C. § 102, "there must be **no difference** between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention" (emphasis added). *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F. 2d 1565; 18 U.S.P.Q. 2d 1001; 18 U.S.P.Q. 2d 1896 (Fed. Cir. 1991), emphasis added. As expressed in *Richardson v. Suzuki Motor Co. Ltd.*, 868 F. 2d 1226, 1236; 9 U.S.P.Q. 2d 1913, 1920 (C.A.F.C., 1989), "[t]he **identical invention** must be shown in **as complete detail** as is contained in the...claim" (emphasis added). In order for the instant claims to be anticipated, there must be no difference between the amines (e.g. aliphatic or cycloaliphatic) of the instant invention and the cited prior art.

Nakafutami teaches the use of a vulcanization accelerator that may be an aldehyde-amine type (Col. 7, lines 16-18). Nakafutami teaches the use of an aromatic amine as an antioxidant or age resistor (Col. 8, lines 34-42). However, Nakafutami fails to teach the use of either an aliphatic or cycloaliphatic amine as recited by instant claim 13. *See* Claim 13 at (d)(ii). Therefore, Nakafutami fails to teach every element to the instant claims.

Jalics teaches the use of an amine as a Lewis base (Col. 5, lines 2-6). Jalics further teaches the use of a sulfur donor that may be amine disulfide (Col. 8, lines 34-35). Jalics also teaches the use of an aromatic amine as an antioxidant or age resistor (Col. 8, lines 46-47). Finally, Jalics

teaches the use of a vulcanization accelerator that may be an amine type (Col. 9, lines 11-13). Jalics teaches the use of organic solvents including aliphatic and cycloaliphatic alcohol (Col. 6, lines 30-33). However, Jalics fails to teach the use of either an aliphatic or cycloaliphatic amine as recited by instant claim 13. *See* Claim 13 at (d)(ii). Therefore, Jalics fails to teach every element to the instant claims.

Halasa teaches the use of an amine as a Lewis base (Col. 6, lines 10-20 and 35-39). Halasa also teaches the use of saturated aliphatic solvents such as cyclohexane (Col. 5, lines 5-7). However, Halasa fails to teach the use of either an aliphatic or cycloaliphatic amine as recited by instant claim 13. *See* Claim 13 at (d)(ii). Therefore, Halasa fails to teach every element to the instant claims.

Bomal teaches amine functional groups (Col. 5, line 57 and Col. 11, line 37). Bomal also teaches silica-coating agents such as amines (Col. 17, lines 10-11). In addition, Bomal teaches aliphatic monocyclic or polycyclic groups (Col. 5, lines 6-7 and Col. 6, lines 13-14). However, Bomal fails to teach the use of either an aliphatic or cycloaliphatic amine as recited by instant claim 13. *See* Claim 13 at (d)(ii). Therefore, Bomal fails to teach every element to the instant claims.

Sagatta teaches accelerators that may be amines (Col. 4, lines 35-36). Sagatta also teaches the use of a sulfur donating agent that may be amine disulfide (Col. 4, lines 41-42). Sagatta further teaches antidegradants that may be amines (Col. 4, lines 47-54). Sagatta teaches the use of amine accelerators (Col. 5, lines 13-14). However, Sagatta fails to teach the use of either an aliphatic or cycloaliphatic amine as recited by instant claim 13. *See* Claim 13 at (d)(ii). Therefore, Sagatta fails to teach every element to the instant claims.

Since each of the cited references fails to teach each and every element of the claimed invention, Applicants respectfully submit that the cited art fails to anticipate the instant invention. Applicants, therefore, respectfully request withdrawal of all rejections under 35 U.S.C. §102.

3. Amended Claims are Non-obvious

Claims 17-21 have been rejected under 35 U.S.C. §103(a) as unpatentable over Sagatta. Claims 13-25 have been rejected under 35 U.S.C. §103(a) as unpatentable over Nakafutami, Jalics or Halasa in view of EP 747425. Applicants traverse these rejections and respectfully assert that all pending claims are not obvious over the cited references. Claims 15-25 are dependent on independent Claim 13. Therefore, the response to these rejections will be addressed primarily to Claim 13.

According to MPEP 2143.03, “[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” The instant invention teaches compositions that comprise at least one aliphatic or cycloaliphatic amine. *See e.g.* pending Claim 13. Since the cited prior art neither teaches nor suggests compositions with such an amine, they fail to satisfy the requirements for a finding of obviousness set forth in MPEP 2143.03.

Applicants respectfully invite the Examiner's attention to the remarks in the preceding section regarding novelty of claim 13 over Sagatta. Sagatta fails to teach or suggest the use of either an aliphatic or cycloaliphatic amine as recited by instant claim 13. Therefore, one of ordinary skill in the art would not be motivated to incorporate such an amine in the composition of Sagatta.

Applicants respectfully invite the Examiner's attention to the remarks in the preceding section regarding novelty of claim 13 over Nakafutami, Jalics, and Halasa. Each of these references fail to teach or suggest the use of either an aliphatic or cycloaliphatic amine as recited by instant claim 13. Therefore, one of ordinary skill in the art would not be motivated to incorporate such an amine in the composition of either Nakafutami, Jalics or Halasa.

EP 747425 teaches the use of tertiary amine compounds as microstructure-modifying agents (page 3, lines 38-39). EP 747425 further teaches the use of a diene polymer rubber having a

primary amino group (e.g. page 2, lines 42-50). However, EP 747425 fails to teach or suggest use of an aliphatic or cycloaliphatic amine. Moreover, whether considered alone or in combination with either Nakafutami, Jalics or Halasa, EP 747425 fails to teach or suggest the instantly claimed composition.

In summary, each of the cited references, whether considered alone or in combination, fails to teach or suggest each and every element of the claimed invention. Therefore, Applicants respectfully submit that the cited art fails to anticipate the instant invention and request withdrawal of all rejections under 35 U.S.C. §103(a).

3. Conclusion

In view of the foregoing remarks, Applicant believes that the present application is in condition for allowance. A timely issuance of a Notice of Allowance is respectfully solicited.

Respectfully submitted,



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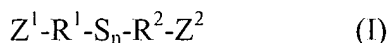
MARKED-UP COPY OF AMENDED CLAIMS

13. (Amended) A [R]ubber composition vulcanizable with sulfur [, characterized in that it] which comprises

a) at least one polymer selected from the group consisting of diene polymers, olefin/monomeric diene copolymers and halogenated isoolefin/para-alkylstyrene copolymers;

b) silica or mixture of silicas as filler;

c) at least one agent promoting linking between the silica and the polymer, said agent having the formula

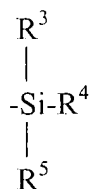


wherein

n is an integer between 2 and 8,

R^1 and R^2 , which may be the same or different, are each selected from among substituted or unsubstituted alkylene groups having 1 to 18 carbon atoms and of substituted or [unsubstituted] unsubstituted arylene groups having 6 to 12 carbon atoms,

Z^1 and Z^2 , which may be the same or different, each represents a group



wherein R^3 , R^4 and R^5 , which may be the same or different, are each selected from among alkyl groups having 1 to 4 carbon atoms, phenyl groups, alkoxy groups having 1 to 8 carbon atoms, and cycloalkoxy groups having 5 to 8 carbon atoms, with the proviso that at least one of R^3 , R^4 and R^5 is an alkoxy or cycloalkoxy; and

d) at least one guanidine substituted by at least two groups, which may be the same or different, and each selected from among alkyl, aryl or aralkyl groups;

wherein the composition satisfies at least one of the following features (i) and/or (ii):

- (i) the composition comprises at least one diene polymer which has at least one amino terminal group of an aliphatic or cycloaliphatic amine which is bonded thereto at the end of the chain, the polymer then being devoid of alkoxysilane and silanol group; and
- (ii) the composition comprises at least one free aliphatic or cycloaliphatic amine.

15. (Amended) Composition according to Claim [14] 15 wherein the filler comprises at least 40% by weight of silica.

23. (Amended) A method of preparing a composition [Composition] according to Claim 22 comprising in order preparing [, wherein] the polymer [is prepared] in solution, stopping the polymerization, adding [and that] the aliphatic or cycloaliphatic amine [is introduced into this] to the solution, [after stopping the polymerization] and [before] stripping [of] the solvent.